



孕龍科技股份有限公司
Zeroplus Technology Co., Ltd.

SPECIFICATION

MODEL: B10006-LAP-DS18B20-M

PART NO: _____

VERSION: V1.00

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to Zeroplus Technology after signing.

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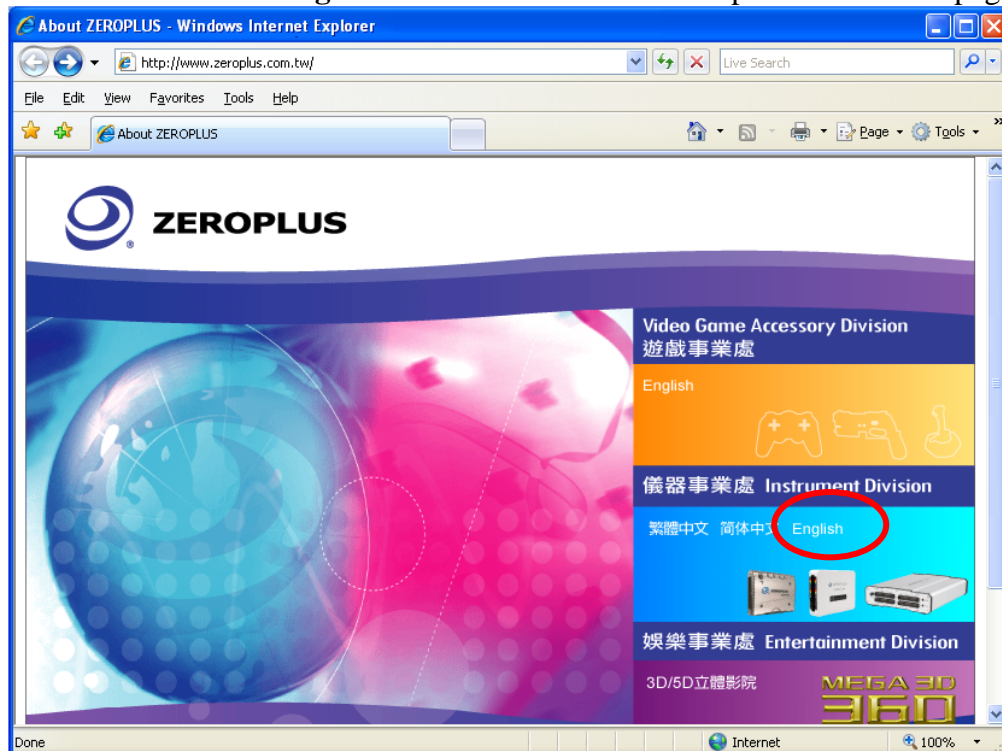
1 Software Download

Please download the software as the following steps:

Remark: We won't have additional notice for you, when there is any modification of the module specification. If there is some unconformity caused by the module version upgrade, users should take the module software as the standard.

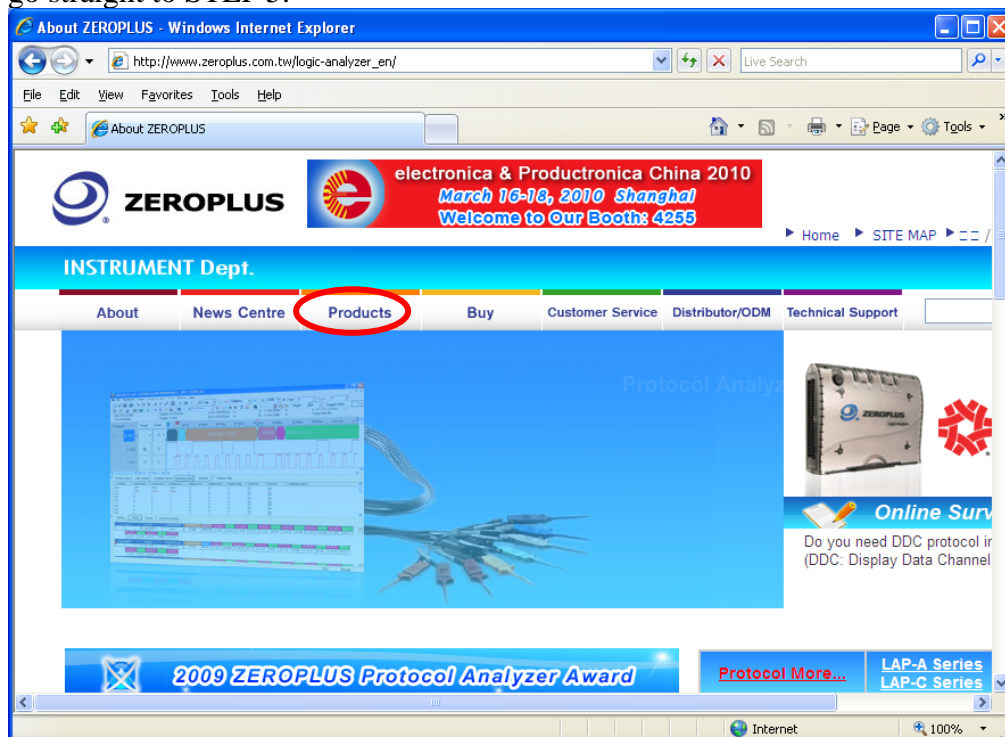
STEP 1. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

STEP 2. Click **English** in the Instrument Division part on the Homepage.

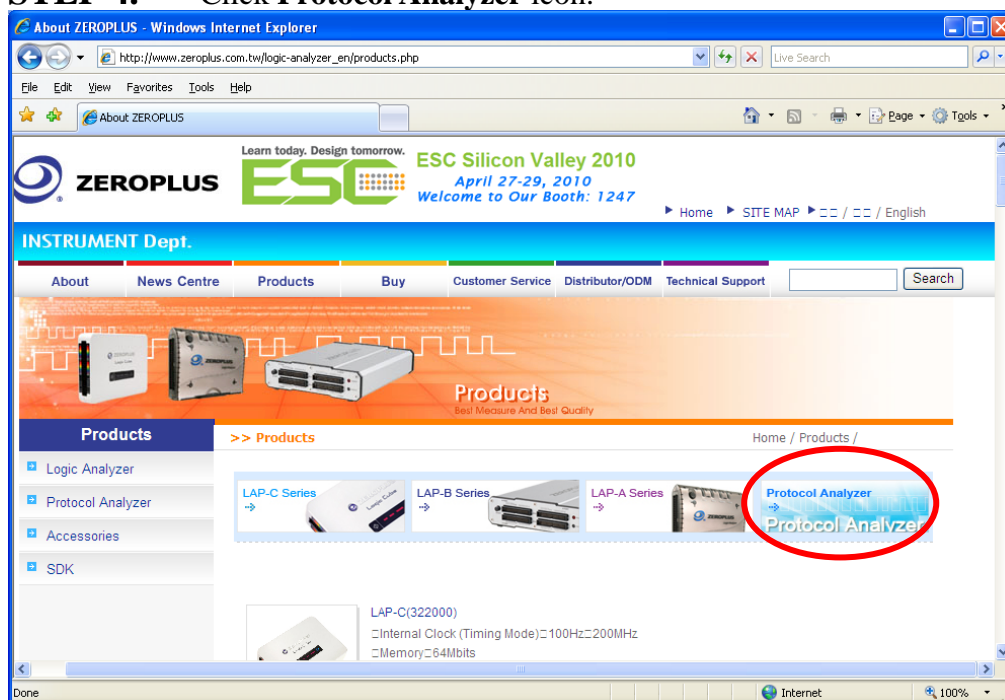




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

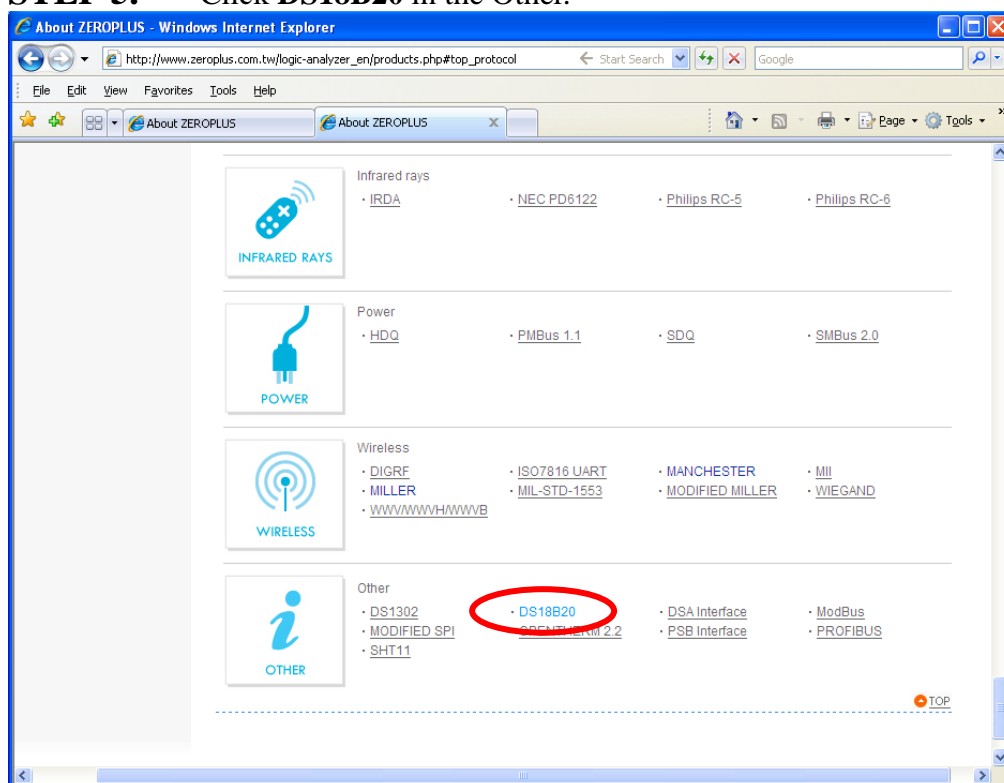


STEP 4. Click **Protocol Analyzer** icon.

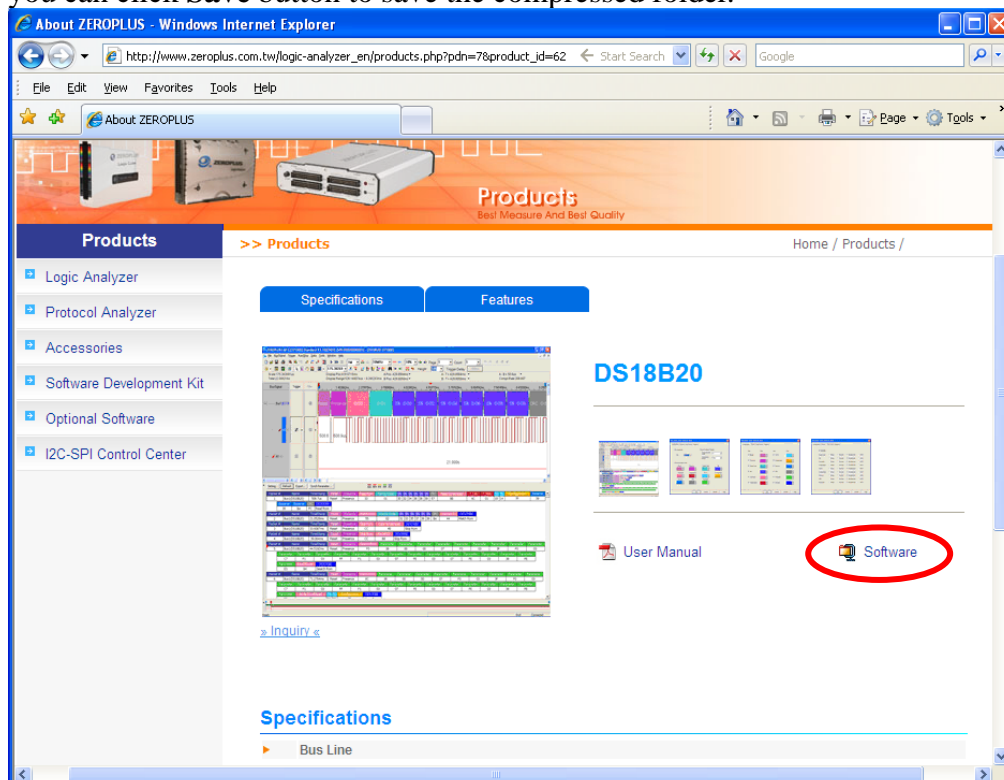




STEP 5. Click **DS18B20** in the Other.



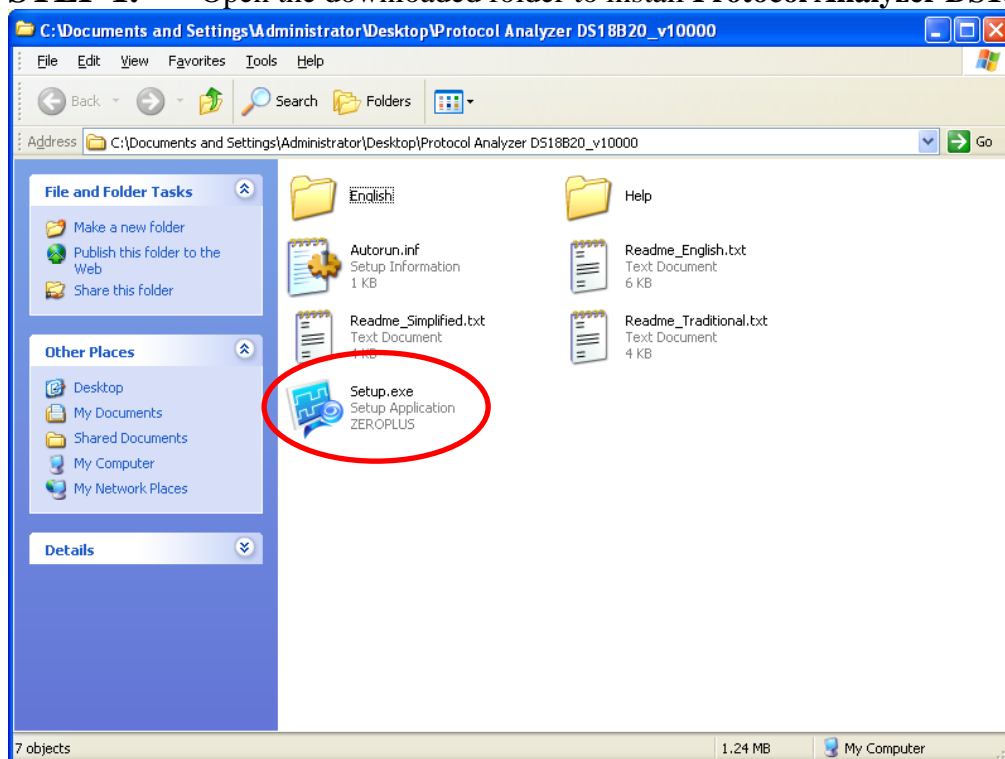
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed folder.



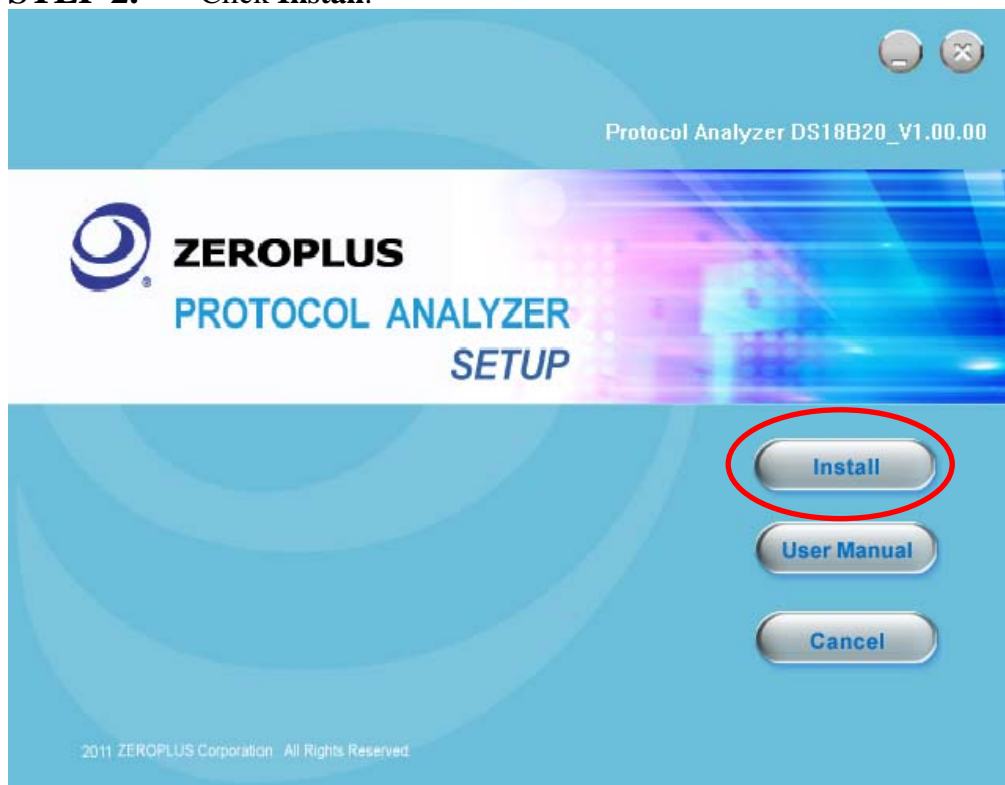


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer DS18B20**.

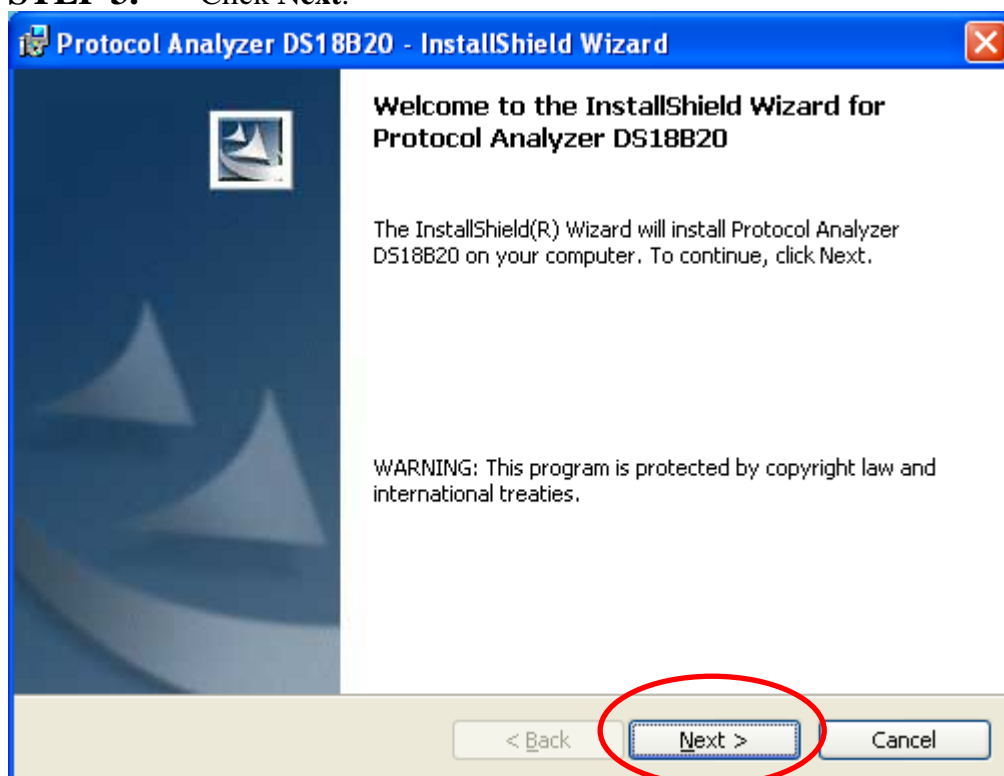


STEP 2. Click **Install**.

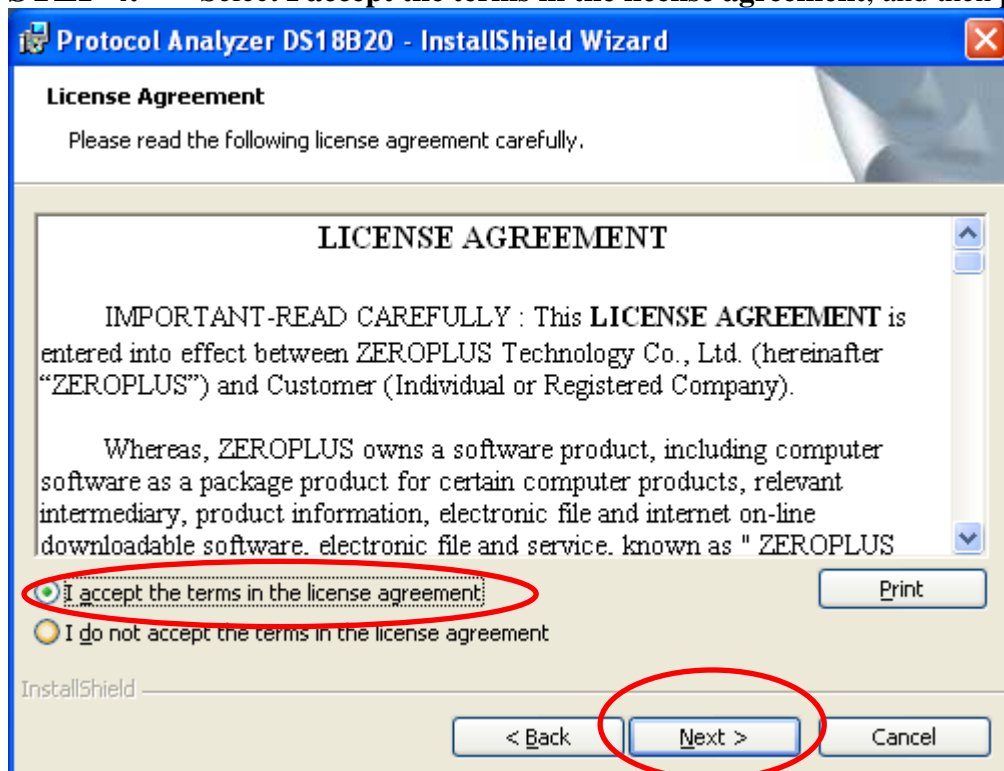




STEP 3. Click Next.



STEP 4. Select **I accept the terms in the license agreement**, and then press **Next**.





STEP 5. Fill in users' information in the below dialog box and click **Next**.

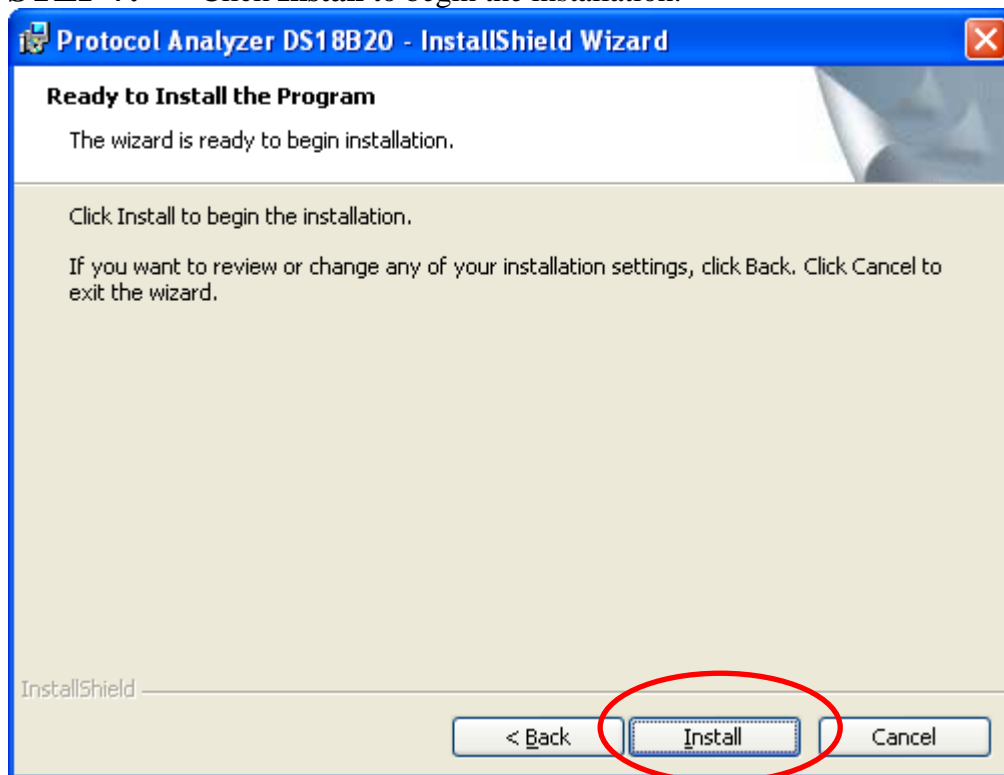
The dialog box is titled "Protocol Analyzer DS18B20 - InstallShield Wizard". It has a "Customer Information" section with the instruction "Please enter your information." Below this, there are two text input fields: "User Name:" with "Microsoft" entered, and "Organization:" with "User" entered. Further down, there is a section "Install this application for:" with two radio button options: "Anyone who uses this computer (all users)" (which is selected) and "Only for me (Microsoft)". At the bottom, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

STEP 6. Select **Complete** and then click **Next**.

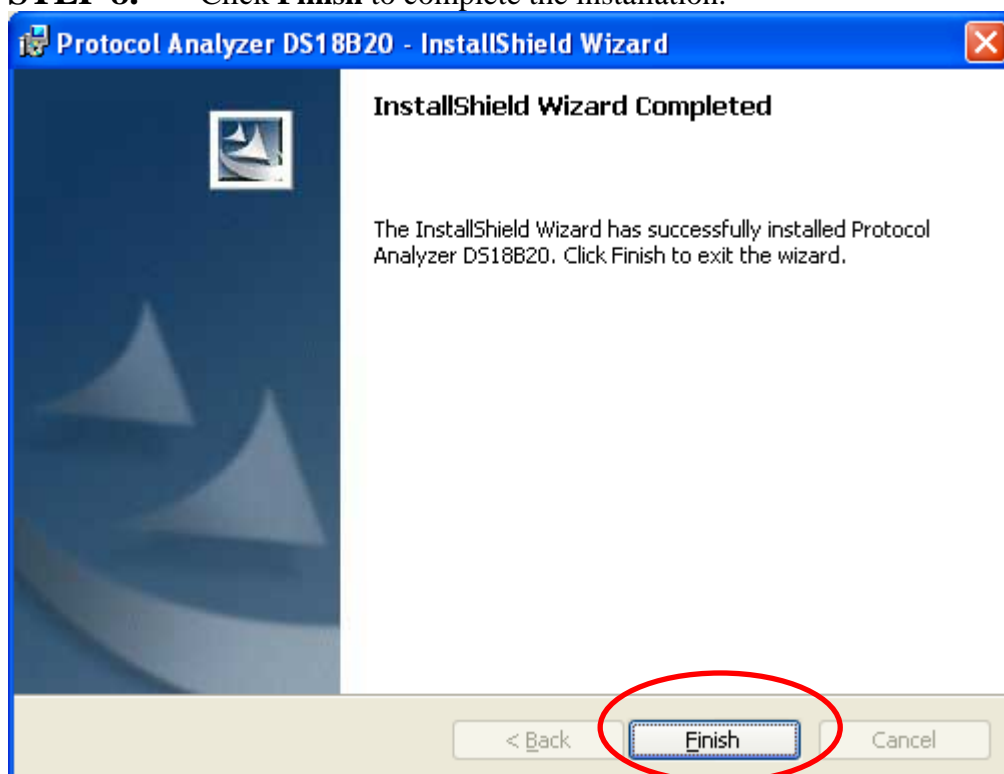
The dialog box is titled "Protocol Analyzer DS18B20 - InstallShield Wizard". It has a "Setup Type" section with the instruction "Choose the setup type that best suits your needs." Below this, there is a text input field with "Please select a setup type." and two radio button options: "Complete" (which is selected) and "Custom". The "Complete" option has a description: "All program features will be installed. (Requires the most disk space.)" and is accompanied by a small icon of a computer with a red 'X'. The "Custom" option has a description: "Choose which program features you want installed and where they will be installed. Recommended for advanced users." and is accompanied by a small icon of a computer with a red 'X'. At the bottom, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.



STEP 7. Click **Install** to begin the installation.



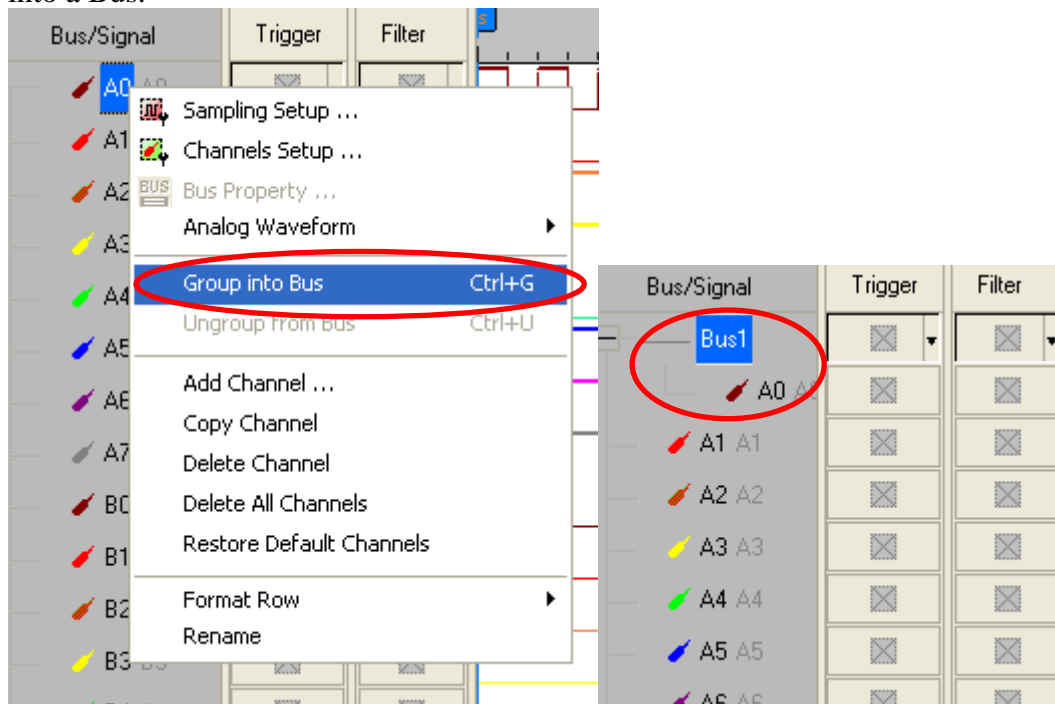
STEP 8. Click **Finish** to complete the installation.



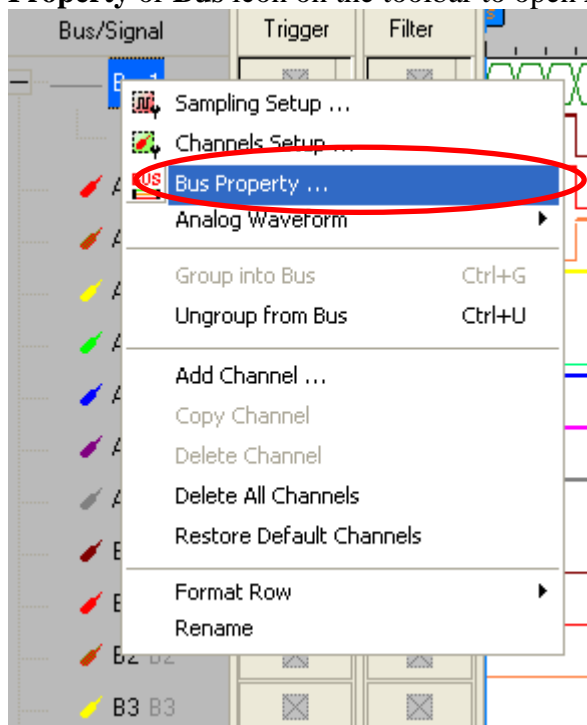


3 Software Register

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. DS18B20 needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

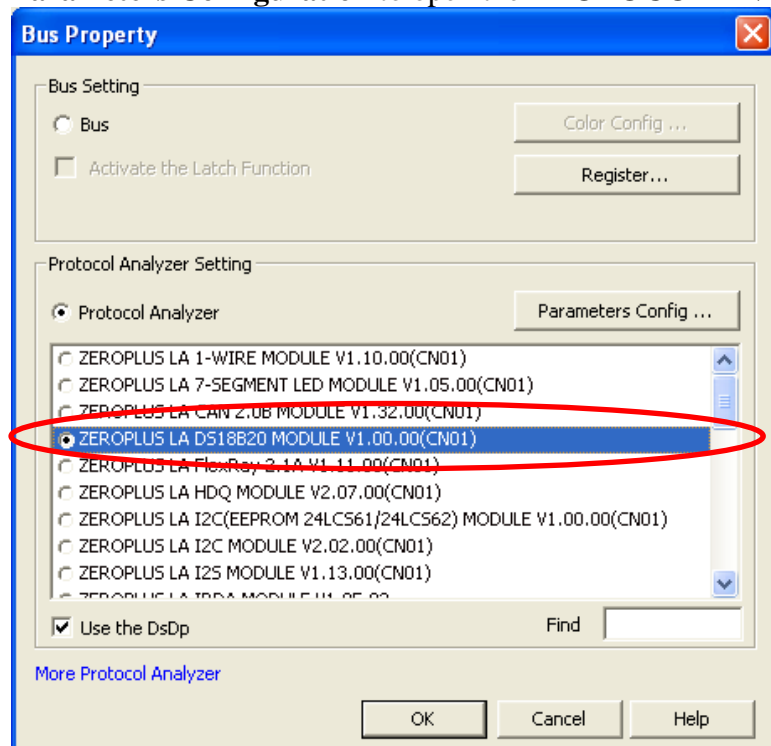


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

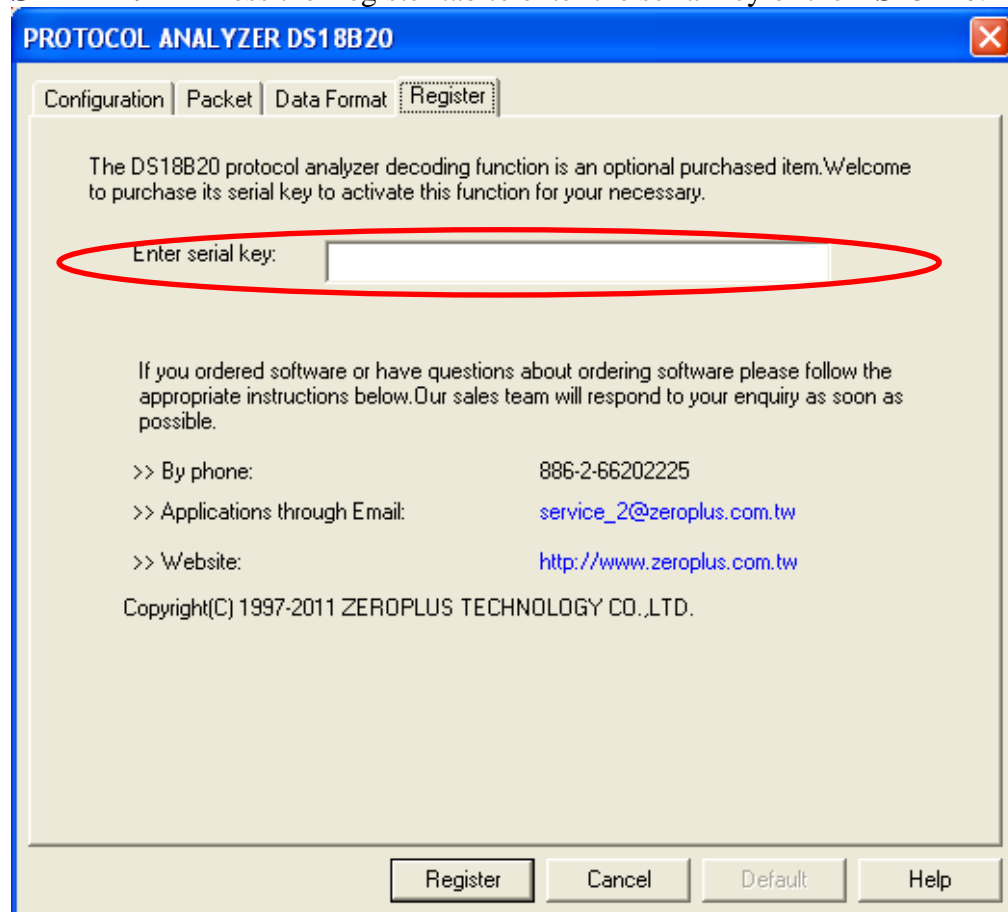




STEP 3. For Protocol Analyzer DS18B20 Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA DS18B20 MODULE V1.00.00 (CN01)**. Next click **Parameters Configuration** to open the **PROTOCOL ANALYZER DS18B20** dialog box.

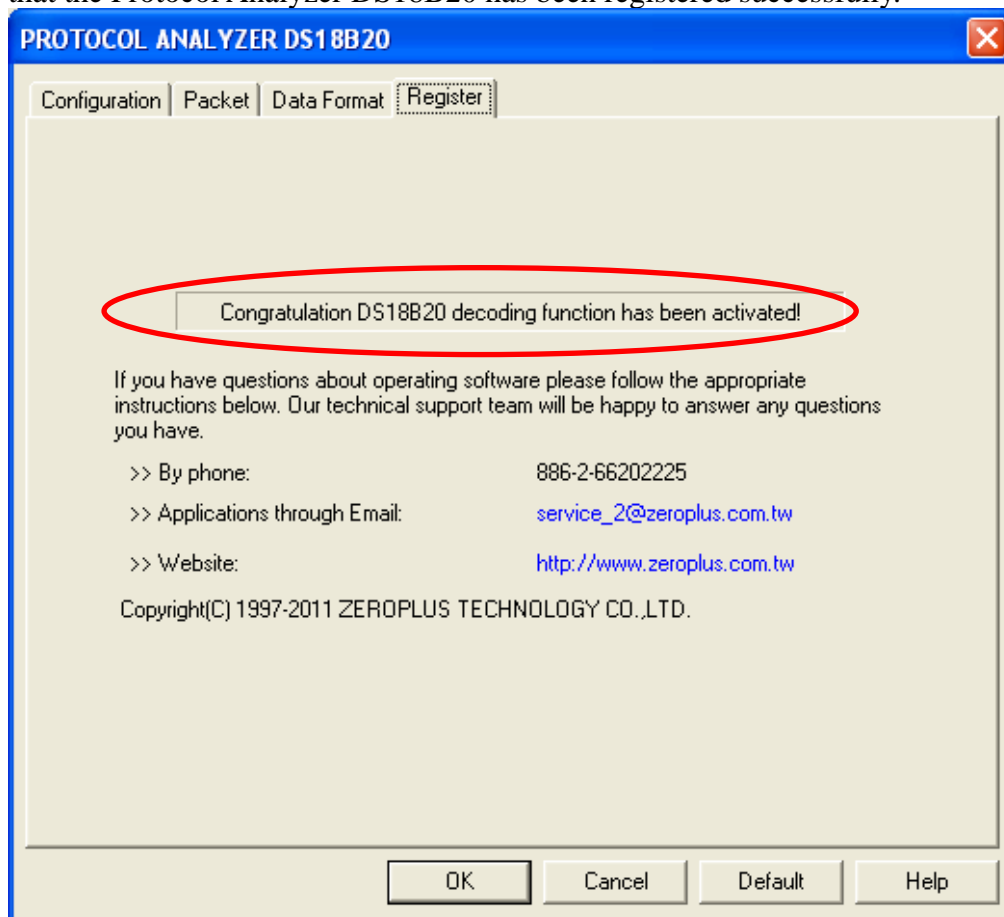


STEP 4. Press the Register tab to enter the serial key of the **DS18B20**. Then, press **Register**.





STEP 5. After pressing the Register button, the following dialog box will appear; it denotes that the Protocol Analyzer DS18B20 has been registered successfully.

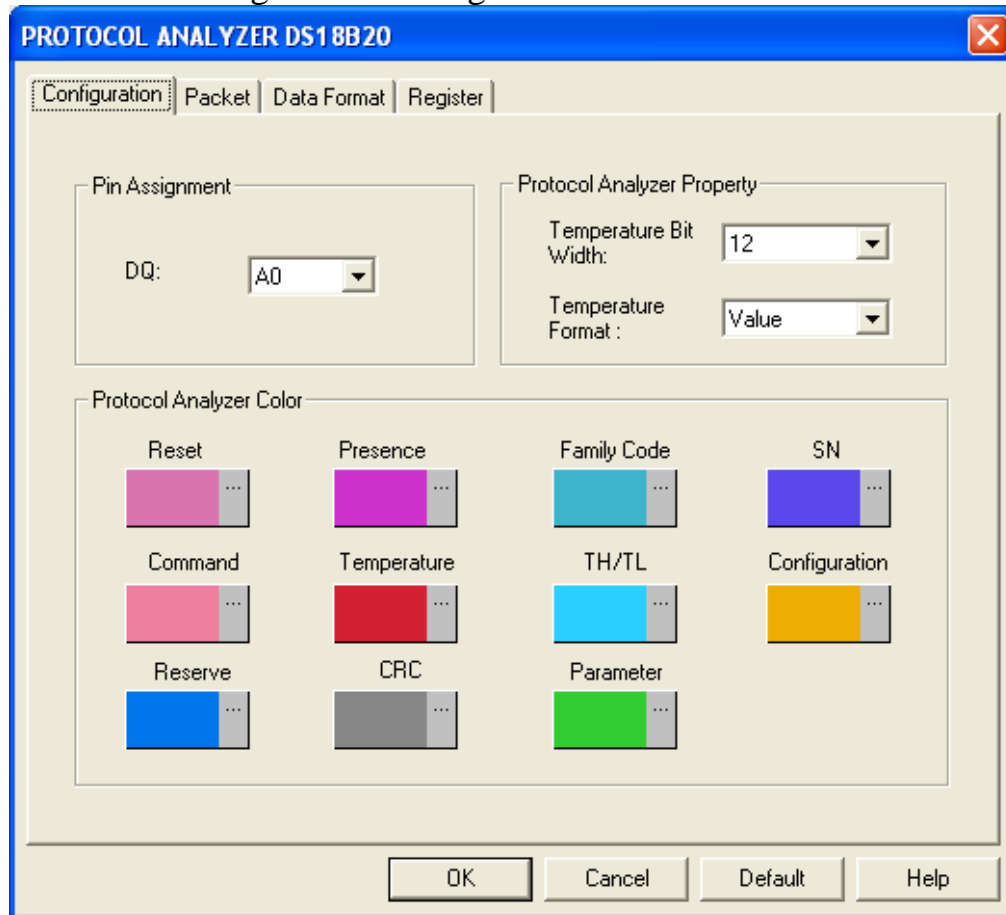




4 User Interface

In the configuration, please refer to below images to select options of **DS18B20** module.

DS18B20 Configuration Dialog Box



Pin Assignment

DS18B20 needs one channel to decode signals.

Protocol Analyzer Property

Temperature Bit Width: Set the Bit Width to 9, 10, 11 or 12, and the default is 12.

Temperature Format: Set the Format to Value, Celsius or Fahrenheit, and the default is Value.

Protocol Analyzer Color

Users can vary the colors of the decoded packet.



DS18B20 Packet Dialog Box

Item	Color	Item	Color
<input checked="" type="checkbox"/> Reset		<input checked="" type="checkbox"/> TH/TL	
<input checked="" type="checkbox"/> Presence		<input checked="" type="checkbox"/> Configuration	
<input checked="" type="checkbox"/> Family Code		<input checked="" type="checkbox"/> Reserve	
<input checked="" type="checkbox"/> SN		<input checked="" type="checkbox"/> CRC	
<input checked="" type="checkbox"/> Command		<input checked="" type="checkbox"/> Parameter	
<input checked="" type="checkbox"/> Temperature		<input checked="" type="checkbox"/> Describe	

In the Packet dialog box, users can set the item to be displayed and the color of items.



DS18B20 Data Format Dialog Box

PROTOCOL ANALYZER DS18B20

Configuration | Packet | Data Format | Register

☒ Activate

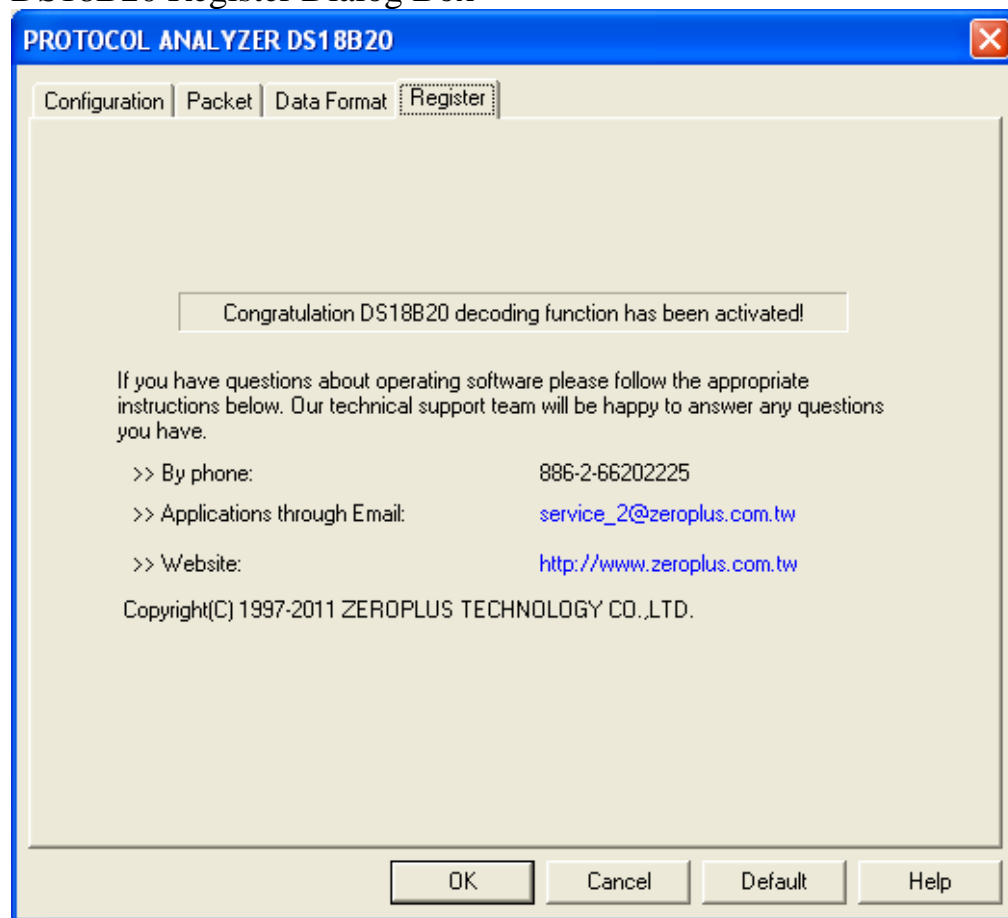
Family Code:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
SN:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Command:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Temperature:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
TH/TL:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Configuration:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Reserve:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
CRC:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII
Parameter:	<input type="radio"/> Binary	<input type="radio"/> Decimal	<input checked="" type="radio"/> Hexadecimal	<input type="radio"/> ASCII

OK Cancel Default Help

Users can set the Data Format of the Family Code, SN, Command, Temperature, TH/TL, Configuration, Reserve, CRC and Parameter as their requirements. When selecting the option, Activate, the data format is decided by the settings in the Protocol Analyzer; when not selecting the option, Activate, the data format is decided by the settings in the main program.



DS18B20 Register Dialog Box

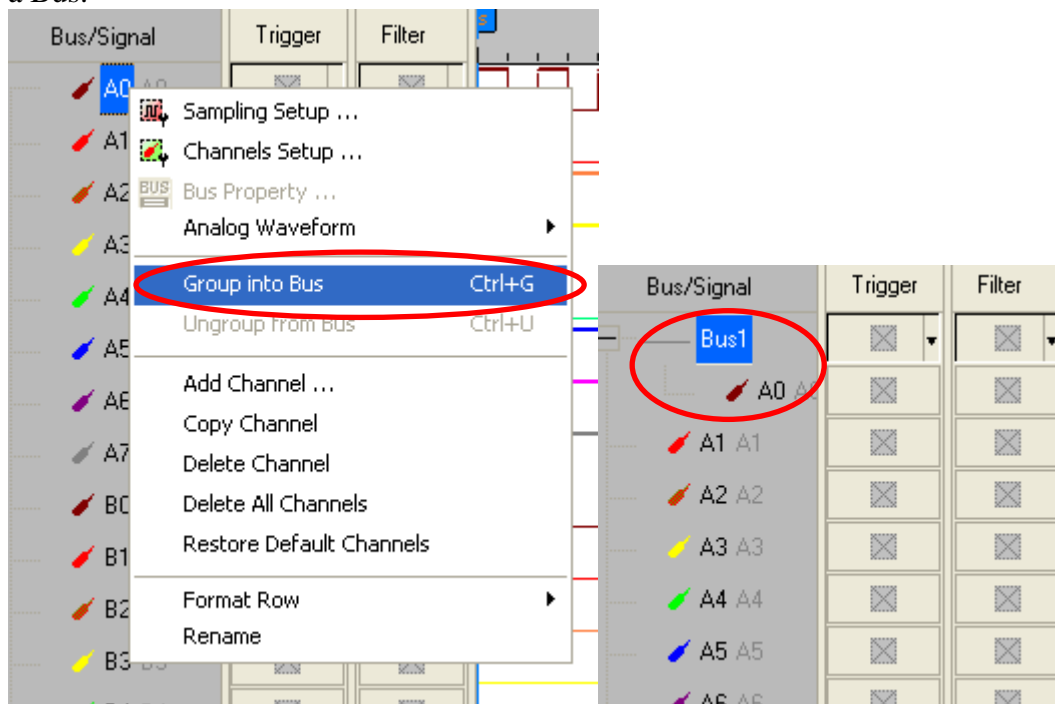


There is ZeroPlus company information. If you have any questions about software operations, you can contact ZeroPlus by Telephone or Email.

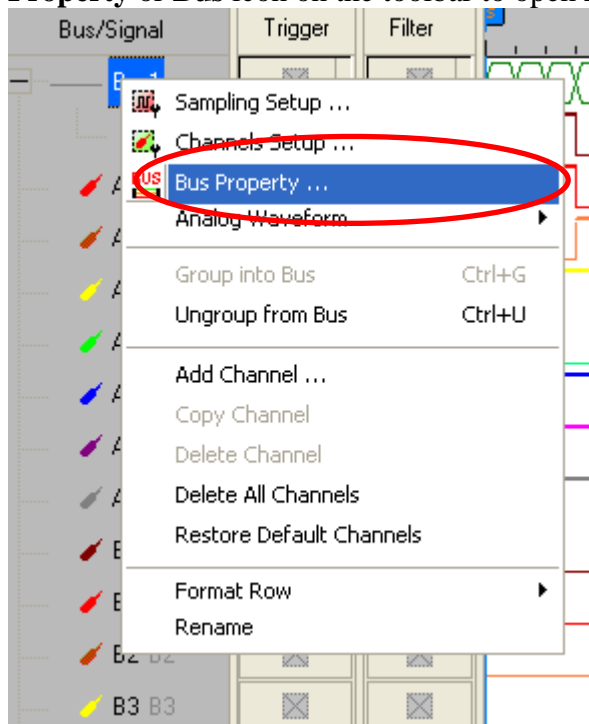


5 Operating Instructions

STEP 1. Group the unanalyzed channels into **Bus1** by pressing the **Right Key** on the mouse. DS18B20 needs one channel to decode signals, so it is necessary to group one or more channels into a Bus.

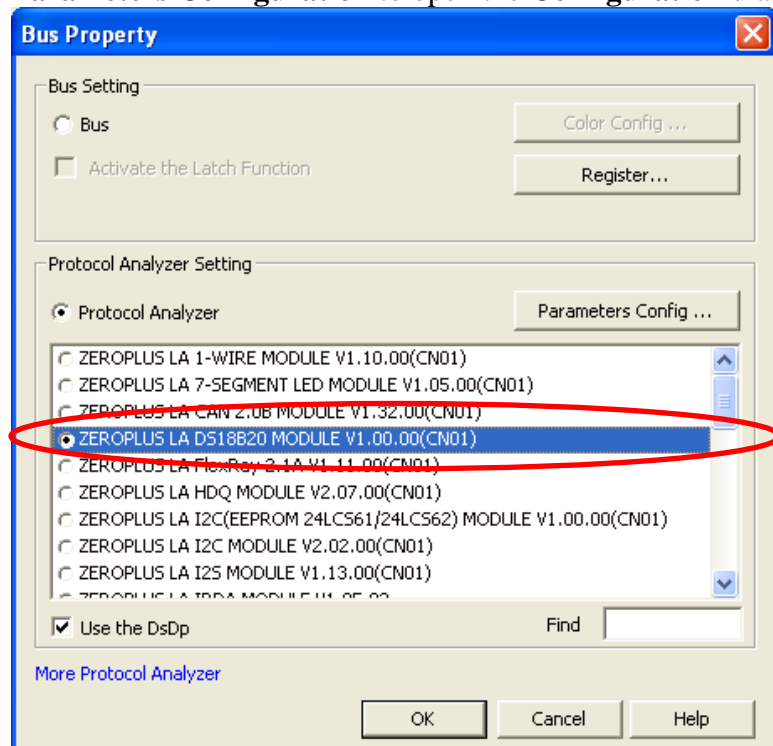


STEP 2. Select **Bus1**, and press **Right Key** on the mouse to list the menu, then press **Bus Property** or **Bus** icon on the toolbar to open **Bus Property** dialog box.

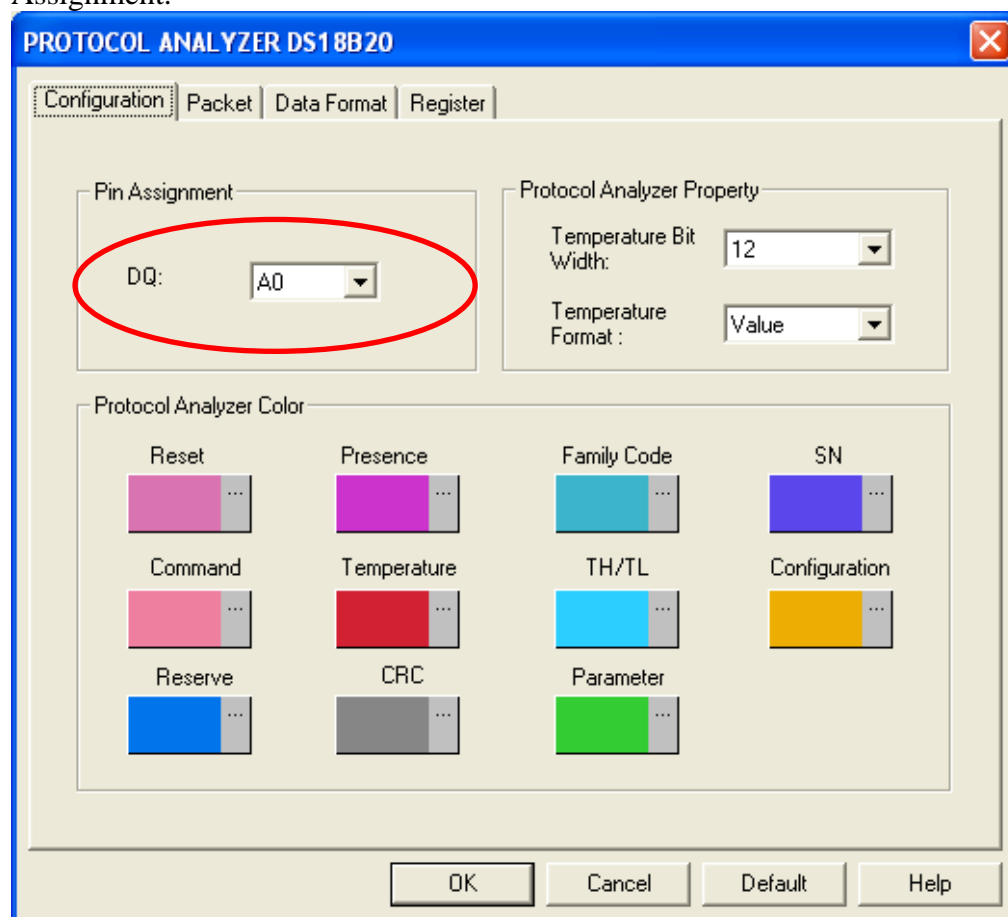




STEP 3. For Protocol Analyzer DS18B20 Parameters Configuration, select Protocol Analyzer, and then choose **ZEROPLUS LA DS18B20 MODULE V1.00.00 (CN01)**. Next click **Parameters Configuration** to open the **Configuration** dialog box.

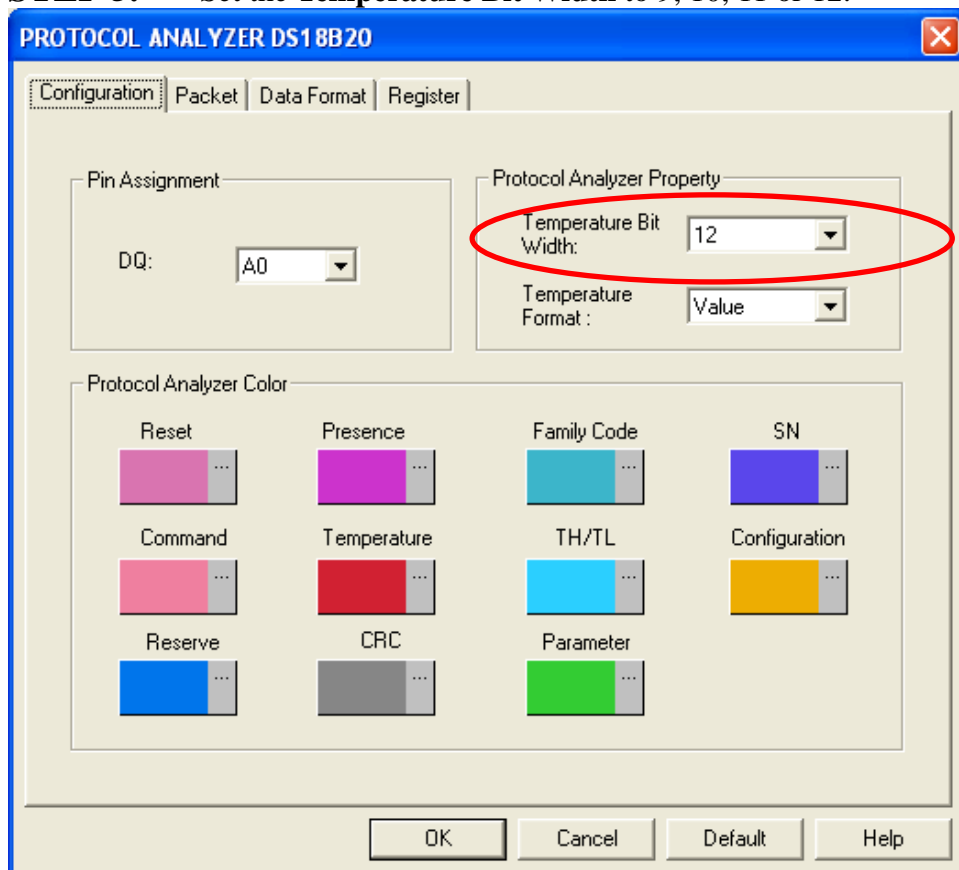


STEP 4. Open the **Configuration** dialog box, and set the channel for the DQ in the Pin Assignment.

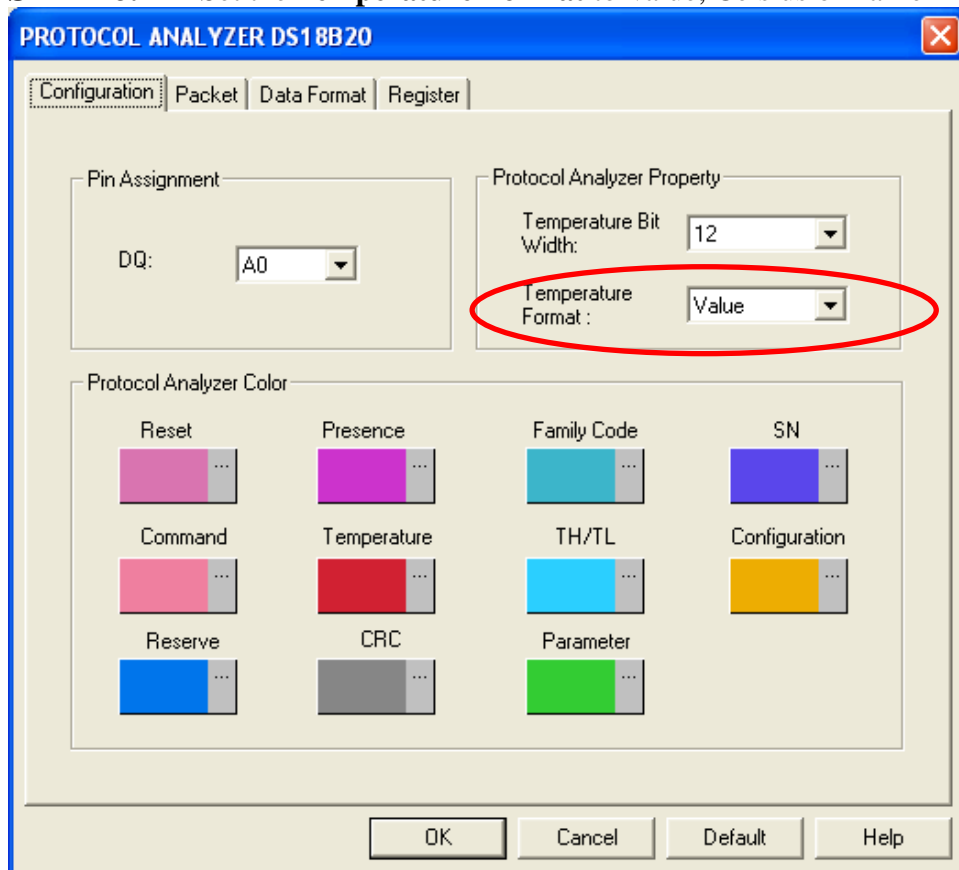




STEP 5. Set the **Temperature Bit Width** to 9, 10, 11 or 12.

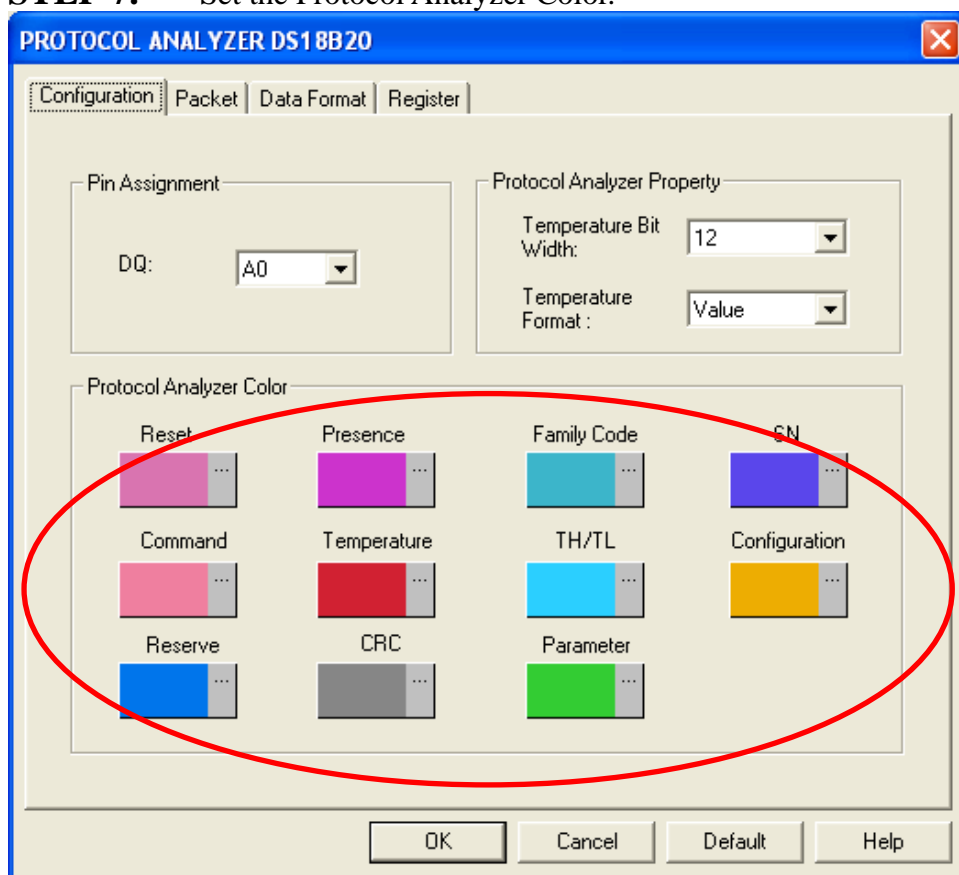


STEP 6. Set the **Temperature Format** to Value, Celsius or Fahrenheit.





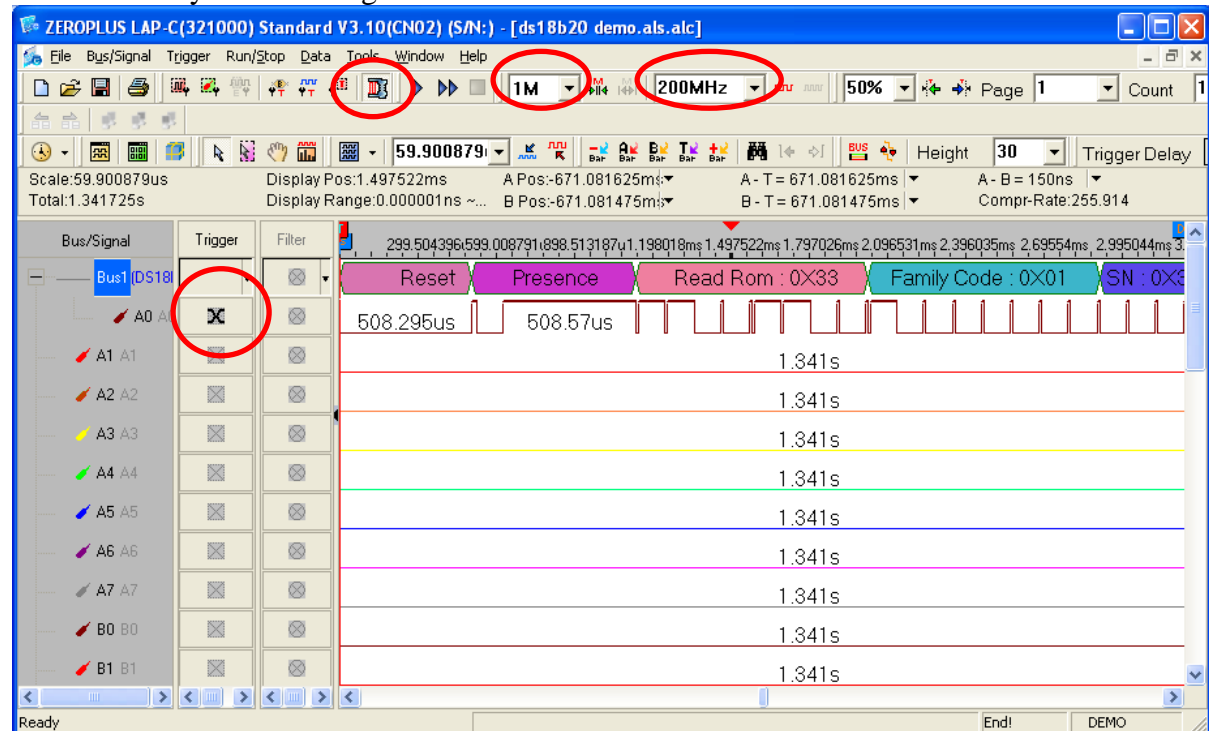
STEP 7. Set the Protocol Analyzer Color.





STEP 8. Following pictures show the completion of the protocol analyzer decoding and packet list. The Compression is activated. And the trigger condition is set as Either Edge, the memory depth is 1M; the sampling frequency is 200MHz (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

